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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/541,092

06/29/2005

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EXAMINER

HAILEMARIAM, EMMANUEL

ART UNIT

PAPER NUMBER

2629

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/541,092

Applicant(s)

TOYOZAWA ET AL.

Examiner

Emmanuel Hailemariam

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 29 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>06/29/2005</u> .  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 4 recites the limitation "the electronic device proper" on line 24. It is not clear as to what the expression "electronic device proper" indicates. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1-6** are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted prior Art (AAPA) in view of Nakamura et al. (US 20010035862 A1).

**As to claim 1 and 4**, AAPA discloses a display device used as a display part of an electronic device, operating according to display data and power supply voltage supplied from a side of the electronic device proper [0002], and formed by a panel in which a display area and a peripheral circuit part for driving the display area are integrally formed in an integrated manner on an insulating substrate [0002], said display device characterized in that: said display area comprises pixel electrodes arranged in a

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form of a matrix, a common electrode opposed to the pixel electrodes [0002], and an electrooptic material retained between the pixel electrodes and the common electrode [0001],[0002]; and said circuit part comprises; a driver for writing a signal voltage to a side of the pixel electrodes according to the display data, a common driver for applying a common voltage to a side of the common electrode[0002], an offset circuit having a coupling capacitor for generating a predetermined offset voltage to adjust a level of the common voltage, and driver with respect to the signal voltage [0002],[0003], and a start circuit for pre-charging the coupling capacitor of the offset circuit to an offset voltage at a time of a rising edge of the power supply voltage, and discharging the coupling capacitor at a time of a falling edge of the power supply voltage [0003],[0004].

But, AAPA does not disclose a start circuit for pre-charging. However, Nakamura et al (hereinafter, Nakamura) discloses a start circuit for pre-charging (fig. 10) (51); [0004], [0005] when switch SW5 is on, pre-charge; [0132]). It would have been obvious to one ordinary skill in the art to provide a starting means, SW5: switch, to pre-charge the circuit so that the standby mode progress to an operational mode. [0132], [0218], [0219].

Nakamura further discloses a panel that can switch between an operational mode and a standby mode according to the switching of the side of the electronic device proper between the normal power consumption state and the low power consumption state in the operational mode [0222], [0224], [0226], [0027] (see fig 32 and 33) the panel operates while supplied with the power supply voltage from the side of the electronic device proper, and makes a desired display by driving the display area; in the standby

mode [0218] the panel has standby control means for stopping the driving of the display area and inactivating the circuit part to reduce power consumption of the panel while the panel remains in a state of being supplied with the power supply voltage from the side of the electronic device proper[0176]; said display area comprises pixel electrodes arranged in a form of a matrix, a common electrode opposed to the pixel electrodes [0010], and an electro optic material retained between the pixel electrodes and the common electrode [0214]; and said circuit part comprises; a driver for writing a signal voltage to a side of the pixel electrodes according to the display data supplied from the side of the electronic device proper, in advance when a return is made from the standby mode to the operational mode, and discharging the coupling capacitor (fig.10 (51) ) when a transition is made from the operational mode to the standby mode ( [0222], [0223], [0226] (see fig.32, and fig.33 )).

**As to claim 2**, Nakamura discloses the display device as claimed in claim 1, characterized in that: the display area and the peripheral circuit part for driving the display area in said panel comprise thin film transistors formed on a common insulating substrate by an identical process [0007]; and said common driver [0214], said offset circuit, and said start circuit are mounted on the common insulating substrate except for the coupling capacitor (fig.10 (51)).

**As to claim 3**, Nakamura discloses display device as claimed in claim 1, characterized in that: said start circuit operates only at the time of the rising edge of the power supply voltage and at the time of the falling edge of the power supply voltage,

and it is in a non-operational state during other times [0221]

**As to claim 5**, Nakamura discloses a display device as claimed in claim 4, characterized in that: the display area and the peripheral circuit part for driving the display area in said panel comprise thin film transistors formed on a common insulating substrate by an identical process [0027]; and said common driver, said offset circuit , and said start circuit are mounted on the common insulating substrate non-operational state except for the coupling capacitor (fig.10 (51) ), [0218]).

**As to claim 6**, Nakamura discloses the display device as claimed in claim 4, characterized in that: said start circuit operates only when the return is made from the standby mode to the operational mode and when the transition is made from the operational mode to the standby mode, and it is in a non-operational state during other times ([0222], [0223], [0226] (see fig.32, and fig.33)).

### **Correspondence**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emmanuel Hailemariam whose telephone number is 571-270-1545. The examiner can normally be reached on M-F 8:00am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amare Mengistu can be reached on 571272-7674. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Emmanuel Hailemariam

07/02/07



AMARE MENGISTU  
SUPERVISORY PATENT EXAMINER